

Amendments to the Claims:

This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~E~~An electric heating device, in particular usable as a supplemental heating heater for a motor vehicles, with several heating elements comprising:
a heater block including a plurality of heating elements, and
a control unit for controlling the heating elements, whereby wherein the control unit forms one structural unit with the heater block and exhibits has power transistors arranged on a printed circuit board and cooling elements allocated to these power transistors, and one wherein each cooling element each is connected through an opening in the printed circuit board to the respective power transistor,
wherein the each cooling element is formed from a cooling body and a heat-conducting element insertable into the opening of the printed circuit board, and
wherein each heat-conducting element of each cooling element is mechanically fixed in the opening.
2. (Currently Amended) ~~E~~The electric heating device according to Claim 1, wherein the each heat-conducting element is glued to the cooling body.
3. (Currently Amended) ~~E~~The electric heating device according to Claim 2, wherein the glue used to glue the each heat-conducting element and the associated cooling body produces an electric insulation of between the heat-conducting element and the cooling body.

4. (Currently Amended) ~~E~~The electric heating device according to Claim 1, wherein ~~the~~each heat-conducting element is made of copper.

5. (Currently Amended) ~~E~~The electric heating device according to Claim 1, wherein ~~the~~each cooling body is made of aluminum.

6. (Currently Amended) ~~E~~The electric heating device according to Claim 1, wherein the mass of ~~the~~each heat-conducting element is very much smaller than that of the associated cooling body.

7. (Currently Amended) ~~E~~The electric heating device according to Claim 1, wherein ~~the~~each opening ~~provided for~~ in the printed circuit board and ~~the~~each heat-conducting element are at least essentially cylindrically formed.

8. (Currently Amended) ~~E~~The electric heating device according to Claim 1, wherein ~~the~~each cooling body has at least an essentially flat section with an opening, ~~the~~each heat-conducting element has an end that protrudes through the opening in the flat section of the associated cooling body, and

~~the~~each heat-conducting element has at least one lateral projection on the end protruding through the associated cooling body ~~and out of the latter for mechanical fastening of the~~ mating element to the cooling body.

9. (Currently Amended) ~~E~~The electric heating device according to Claim 8, wherein the lateral projection on each heat-conducting element is a bulb laterally fitting around the protruding end of the heat-conducting element.

10. (Currently Amended) ~~E~~The electric heating device according to Claim 1, wherein the cooling ~~bodies are~~body is arranged in the heating device such that the air to be heated can be blown around ~~them~~the cooling body via a window openings ~~provided for~~ in a housing of the heating device.

11. (Currently Amended) ~~E~~The electric heating device according to Claim 1, wherein the surface of each of the cooling bodies is provided on the outside with an electrically insulating coating.

12. (Currently Amended) ~~E~~The electric heating device according to Claim 11, wherein the surface of each of the cooling bodies is provided with an electrically insulating coating essentially only in the region opposite the window openings.

13. (Currently Amended) ~~E~~The electric heating device according to Claim 2, wherein the glue is an epoxy resin glue, a silicon glue or an acrylic glue.

14. (Currently Amended) ~~E~~The electric heating device according to Claim 1, wherein ~~the~~each heat-conducting element, as the distance from the associated power transistor increases, has a larger cross-section area.

15. (Currently Amended) ~~E~~The electric heating device according to Claim 14, wherein ~~the~~each heat-conducting element is at least essentially ~~formed cylindrically in shape~~.

16. (Currently Amended) Electric heating device according to Claim 15, wherein the section of ~~the~~each heat-conducting element arranged in the opening of the printed circuit board has an at least essentially conical shape growing smaller in the direction of the end in contact with the associated power transistor.

17. (Currently Amended) ~~Electric heating device according to Claim 16,~~ An electric heating device, usable as a supplemental heater for a motor vehicle, each comprising:

a heater block, and
a control unit for controlling the heating elements, wherein the control unit forms one structural unit with the heater block and has power transistors arranged on a printed circuit board and cooling elements allocated to these power transistors, wherein each cooling element is connected through an opening in the printed circuit board to the respective power transistor,
wherein each cooling element is formed from a cooling body and a heat-conducting element insertable into the opening of the printed circuit board,
wherein each heat-conducting element, as the distance from the power transistor increases, has a larger cross-section area,
wherein each heat-conducting element is at least essentially cylindrical,
wherein the section of each heat-conducting element arranged in the opening of the printed circuit board has an at least essentially conical shape growing smaller in the direction of the end in contact with the power transistor, and
wherein the section of the each heat-conducting element that is arranged in the opening of the printed circuit board has radial projections for mechanical fastening of the heat-conducting element in the opening of the printed circuit board.

18. (Currently Amended) ~~The~~ The electric heating device according to Claim 1, wherein ~~the each~~ cooling body comprises an essentially rectangular cross-section with a first section arranged parallel to the printed circuit board and a second section arranged vertically thereto.

19. (Currently Amended) ~~The~~ The electric heating device according to Claim 18, wherein the first section of ~~the each~~ cooling body has recesses on the side facing the printed circuit board for

accommodating the end of the associated heat-conducting element protruding from the printed circuit board.

20. (Currently Amended) ~~E~~The electric heating device according to Claim 18, wherein the cooling bodies of several adjacent cooling elements are formed in one piece.

21. (Currently Amended) ~~E~~The electric heating device according to Claim 20, wherein the cooling bodies formed in one piece are connected to each other via the first section of each of the cooling bodies.

22. (Currently Amended) An electric heating device comprising:
a heater block having a plurality of heating elements, and
a control unit that forms a single structural unit with the heater block and that controls the heating elements, the control unit including a plurality of power transistors arranged on a printed circuit board and a plurality of cooling elements, each of which is allocated to a respective one of the power transistors,

wherein each of the cooling elements is connected through an opening in the printed circuit board to the associated power transistor, and

wherein each of the cooling elements is formed from a cooling body and a heat-conducting element inserted into the opening of the printed circuit board, and

wherein the heat-conducting element is fixed in the opening in the printed circuit board.

23. (Previously Presented) The electric heating device according to Claim 22, wherein the heat-conducting element of each of the cooling elements is glued to the associated cooling body.

24. (Previously Presented) The electric heating device according to Claim 22, wherein the heat-conducting element of each of the cooling elements is made of one of copper and aluminum.

25. (Previously Presented) The electric heating device according to Claim 22, wherein the cooling body of each of the cooling elements has an essentially flat section with an opening formed therein, wherein

the heat-conducting element of each of the cooling elements protrudes through the opening in the flat section of the associated cooling body, and wherein

the heat-conducting element of each of the cooling elements has at least one lateral projection on the end protruding through the associated cooling body and out of the latter for mechanical fastening of the associated cooling body to the printed circuit board.

26. (Previously Presented) The electric heating device according to Claim 22, further comprising a housing that contains the heating device and that has window openings formed therein, and wherein the cooling bodies are arranged in the heating device such that air to be heated can be blown around them via the window openings in the housing.

27. (Previously Presented) The electric heating device according to Claim 22, wherein an outside surface of each of the cooling bodies is provided with an electrically insulating coating.

28. (Previously Presented) The electric heating device according to Claim 22, wherein a cross-sectional area of each of the cooling bodies increases as the distance from the associated power transistor increases.

29. (Currently Amended) the electric heating device according to Claim 22, wherein each of the cooling bodies is at least essentially rectangular in cross-section with a first section extending

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at least generally parallel to the associated printed circuit board and a second section extending at least generally perpendicularly therefrom.